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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Noboru Aoki

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RESTON, VA 20190

EXAMINER

THOMAS, ASHISH

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/727,977	Applicant(s) AOKI ET AL.	
	Examiner ASHISH K. THOMAS	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 1/15/2008 have been fully considered but they are not persuasive.

In page 9, paragraphs 2 and 3 of the remarks, the Applicant argues that Hashimoto is an invalid reference since its "paper discharge error is not an error that occurs when the data inputted into the printer does not correspond to the data set on the printer."

In response, please note that the claim language of the present application fails actually describe what constitutes a pre-determined error. More specifically, the claim language fails to identify that the predetermined errors are errors that occur when the data inputted into the printer does not correspond to the data set on the printer. In view of this rather broad claim language, the Hashimoto reference teaches the concept of predetermined errors in paragraph 39 when it talks about "continuous" errors. Please note that the Examiner is equating the concept of predetermined errors, as stated in the claim language, to errors wherein printing is continued(paragraph 39).

In page 9, paragraphs 4 and 5 of the remarks, the Applicant argues that Hashimoto fails to define a system wherein "the printing operation is performable even if the error occurs." The Applicant contends that Hashimoto teaches a system wherein the printing operation is performed in another image forming portion when the "printing operation halting error" occurs.

In response, please look at the modified rejection of the amended claims 1 and 5. This rejection clearly puts forth the concept of detecting a predetermined error wherein the printing operation is performed even if the error occurs. Paragraph 58 teaches that a printing operation is continued even after the error indicative of low ink is detected.

In page 9, paragraphs 6 and 7 of the remarks, the Applicant asserts that Hashimoto does not teach the concept of “plurality of predetermined errors.”

In response, the Examiner respectfully disagrees with this assertion. Please note that the current wording of claim language fails to identify what constitutes the plurality of predetermined errors. In view of this broad claim language, the Examiner is interpreting the plurality of predetermined errors to read on the detection of low ink at different stages (figure 4b). Each stage of ink detection can constitute one type of predetermined error. And figure 4b teaches the existence of plurality of stages. This, in turn, teaches the existence of a plurality of predetermined errors.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 3, and 5 are rejected under 35 U.S.C. 102(e) as being anticipated by Hashimoto(U.S. 2002/0039116).

Regarding claim 1, Hashimoto discloses a printer comprising:

- a printing unit that performs a print operation to print images on a recording medium based on print data; **(Figure 1 and paragraph 44 teach a printing machine that can output images on a recording medium.)**
- an error detecting unit that detects a predetermined error during the print operation, the predetermined error having a given nature such that the print operation is performable even if the error occurs; **(Paragraph 39 teaches the concept of detecting errors wherein the printing is continued and also errors wherein the printing is halted. The type of errors wherein printing is continued reads on the concept of predetermined error stated in the claim language.)**
- a categorizing unit that categorizes the detected predetermined error into one of a plurality of given categories based on the nature, wherein each of said given categories includes a plurality of different predetermined errors from among the predetermined errors. **(Paragraph 58 and figure 4b teach that ink exhaustion is categorized into a plurality of stages. The plurality of stages of ink exhaustion read on plurality of different predetermined errors.)**

- a setting unit that sets one of error recovery method from among different error recovery methods for each of a plurality of error categories, the error recovery methods including an automatic print continuation and a recovery by user's operation; **(Paragraph 74 teaches that in a situation that could continue the printing in view of the detected error, the user can select whether to perform a recovery action or continue printing.)**
- a memory that stores a correspondence data indicating the set error recovery method of each error category; **(Paragraph 58 discloses a ROM 34 that stores the error recovery data.)**
- a method detecting unit that detects an error recovery method corresponding to the categorized detected Error category with reference to the correspondence data stored in the memory; **(Paragraphs 58 and 71 teach that recovery methods such as user action or continuation of printing are implemented based on the type of error category. And note that the errors are classified into a group based on the level of exhaustion.)**
- and an error recovery unit that executes an error recovery procedure according to the error recovery method detected by the method detecting unit. **(Paragraph 71 teaches that the recovery of an error is executed based on the type of error.)**

Regarding claim 3, Hashimoto teaches “the printer according to claim 1, wherein the memory is a nonvolatile memory.” (**Paragraph 54 teaches a ROM 32.**)

Regarding claim 5, it is rejected in the same manner as claim 1. Note that claim 5 teaches a storing medium storing a control program that corresponds to the functionalities of the printer stated in claim 1.

Claim Rejections - 35 USC § 103

3. Claims 2, 4, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto(U.S. 2002/0039116) in view of well known prior art(Official Notice).

Regarding claim 2, Hashimoto discloses “the printer according to claim 1, further comprising a display unit for displaying a message.” (**Paragraph 71 divulges an output screen that displays the error recovery method.**) Hashimoto also teaches a method wherein “in response to the error recovery method detected by the method detecting unit being an automatic print continuation recovery method, the error recovery unit automatically executes an error recovery procedure.” (**As described before, paragraph 71 of Hashimoto describes an error recovery method that automatically continues the print process when an error is detected.**)

But Hashimoto is silent on a printer comprising “an input unit for a user to input various instructions.” Nor does Hashimoto teach a method wherein “displays an information on the display representing the error recovery procedure and, in response to receiving a continue command from a user within a given time window relative to

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display, control the printing unit to continue the print operation, and in response to not receiving the continue command from the user within the given time window, executing a skip printing procedure and in response to the error recovery method detected by the method detecting unit being a user operation recovery method, the error recovery unit controls the display unit to display an error message and an operation guide message, prompting the user to input a instruction, and executes an error recovery procedure in accordance with the instruction from the user.”

The examiner would like to take official notice and assert that it is well known in the art that a printer comprises “an input unit for a user to input various instructions.” There are also well known methods that “display an information on the display representing the error recovery procedure and, in response to receiving a continue command from a user within a given time window relative to display, control the printing unit to continue the print operation, and in response to not receiving the continue command from the user within the given time window, executing a skip printing procedure and in response to the error recovery method detected by the method detecting unit being a user operation recovery method, the error recovery unit controls the display unit to display an error message and an operation guide message, prompting the user to input a instruction, and executes an error recovery procedure in accordance with the instruction from the user.” **(Please take note that there are numerous print systems out there that ask the user to input error recovery commands and proceed from there based on the user inputted commands. Most**

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notably, HP LaserJet 4200 is one such printer that can wait for the user input.

And when based on the user input, an error recovery procedure is carried out.)

Therefore, it would have been obvious for one of ordinary skill in the art, at the time of the present invention, to modify Hashimoto with well known prior art to fully realize the printer stated in claim 2.

The motivation would be to allow the user more of an input in the recovery process.

Regarding claim 6, it is rejected in the same manner as claim 2.

Regarding claim 4, the previously described Hashimoto reference fully teaches the subject matter described in claim 1.

But Hashimoto is silent on “an updating unit for receiving an updating instruction from the user and for updating the correspondence data in accordance with said updating instruction.”

The Examiner though takes official notice and asserts that a printer comprising “an updating unit for receiving an updating instruction from the user and for updating the correspondence data in accordance with said updating instruction” is well known in the art. **(As previously stated, there are numerous print systems out there that ask the user to input error recovery commands and proceed there onwards based on the user inputted commands. It is also well known in that art when the user inputs a command, an update is performed based on the newly inputted user commands.)**

Therefore, it would have been obvious for one of ordinary skill in the art, at the time of the present invention, to modify Hashimoto with well known prior art to fully realize the printer stated in claim 4.

The motivation would be to allow the user more of an input in the recovery process and update the recovery methods based on the user inputs.

Conclusion

4. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ASHISH K. THOMAS whose telephone number is (571)272-0631. The examiner can normally be reached on 9:00 a.m. - 5:30 p.m. EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on 571-272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ashish K Thomas/
Examiner, Art Unit 2625

/Mark K Zimmerman/
Supervisory Patent Examiner, Art Unit 2625